



Engaging Places research summary

**Bridging the Gap: A synthesis of research
into the supply and the demand of built
environment education in schools**

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Introduction

The built environment can be defined as:

buildings of all ages and types, the spaces in between them, and their relationship with the natural environment and the local community.

(Department for Culture Media and Sport and the Department for Education and Skills, 2006)

For the purposes of this research project, ‘built environment education’ is a concise term that refers to the various types of learning activity for children and young people of school age which use buildings, places and spaces as a context for learning. It covers many different kinds of built settings such as: historic and contemporary; urban and rural; and exceptional and commonplace. It also has a considerably broad remit ranging from: pupil involvement in designing and building their schools; to projects focusing on the relationship between people and places; to pupils’ exploring their own communities and local built environments; and linking religions, cultures and places.

The value of built environment education

As the joint Department for Culture Media and Sport (DCMS) and Department for Education and Skills (DfES) Advisory Committee on Built Environment Education (JACBEE) highlighted in 2004, education focusing on the built environment has a number of benefits and can provide a wide range of creative, cross-curricular learning opportunities for young people and their communities. It can provide pupils with ‘open-ended, creative learning tasks which can help increase confidence, enhance pupil motivation, provide work satisfaction and contribute to the development of social and lifelong learning skills’ (DCMS and DfES, 2006). More recently, in November 2006, the government launched the Learning Outside the Classroom (LOtC) Manifesto which publicly advocates the importance of children and young people learning beyond the classroom experience. Heritage and the built environment were highlighted as key contexts of LOtC activity.

Engaging Places and the research

Engaging Places is a partnership between the Department for Culture Media and Sport (DCMS), English Heritage, the Commission for Architecture and the Built Environment (CABE), in association with the Department for Children, Schools and Families (DCSF – formerly DfES) and the Academy for Sustainable Communities (ASC). It was set up by DCMS to develop an approach that can make people more aware of the learning opportunities available in the built environment and to ‘unlock’ the educational potential for schools of the historic and contemporary built environment. *Engaging Places* hopes to increase schools’ engagement with the built environment by

developing a national advocacy network which can harness and improve the delivery of the built environment learning services to schools.

In September 2006, the National Foundation for Educational Research (NFER) was commissioned by DCMS and partners to undertake two research projects which independently considered the supply side (providers) and the demand/audience side (teachers/schools) of built environment education. Both sets of research focused on three pilot regions (London, the South East and Yorkshire and the Humber) and consisted of:

Supply side research: (September 2006 – February 2007) an investigation into the provision of work on offer by built environment education providers. Following an initial mapping exercise to identify providers:

- 93 organisations were selected for inclusion in a telephone survey to gather further information about them and the activities they offered
- twelve case study organisations were then chosen for in-depth profiling to illustrate how built environment projects operated on the ground and the variety of provision on offer.

Demand/audience side research: (March 2007 – September 2007) an overview of teachers', headteachers' and governors' views on using buildings and local places as a learning resource. The study involved:

- an initial postal survey of teachers (51), headteachers (13) and governors (7), on the use of built environment education within teaching
- following this, short telephone interviews were conducted with 13 teachers, three headteachers and three governors in order to explore their views on built environment education further.

During the course of the two research projects, DCMS established and worked with:

- three regional advisory groups (one in each of the three pilot regions), comprising representatives from across the built environment sector and Local Authorities (LAs)
- a national advisory group bringing together the regional chairs with national organisations.

These groups provided intellectual and strategic direction in relation to emerging research findings and the development of the *Engaging Places* project.

Key findings and issues from the research

- There is a wide range of learning activity available to schools across the three regions.
- Providers demonstrate a tangible willingness and intent to supply schools with high quality provision, opportunities and experiences. There is also evidence of a clear demand for built environment education from schools and teachers.
- School staff demonstrate awareness of, and enthusiasm for, built environment education and are familiar with the benefits it can bring to teaching and learning. A key issue centres on the need to capitalise on this situation and to build upon teachers' generally positive perceptions of built environment education. Increased understanding of the tangible benefits may be the essential precursor to increased take-up by schools. The sector and providers of built environment education need to further develop and nurture schools' and teachers' understandings of built environment education to increase their confidence to incorporate it into their teaching.
- There is some evidence to suggest that there is a discrepancy between the remit of built environment education providers and the needs of teachers, in that providers see themselves as serving schools primarily at a national and regional level and teachers typically use providers in the local area. As such, providers should seek, more actively, to promote their services to teachers and schools in their immediate locality and maximise the potential of this key audience.
- The potential of local buildings, places and spaces to facilitate and support schools' pursuit of the five outcomes of the Every Child Matters agenda could also provide an effective means of encouraging further take-up. Teachers should be made aware of how built environment education meets each outcome i.e. in terms of Enjoy and Achieve, the stimulating and motivating effect that the practical approach of built environment education can produce can impact of young people's concentration, learning and achievement in other areas of the curriculum.
- More information is needed regarding the availability of, and opportunities associated with, built environment education as well as advice and guidance relating to how to use buildings and local places can be used in teaching.
- From the teachers' perspective, the development and promotion of a single source of information, particularly if web-based, could provide a useful and effective means of supporting their engagement with built environment education.
- The research has also shown that it is important for schools to have someone, such as a practitioner or local authority advisor, who can provide support, inspiration and advocacy for this way of working. There is scope for the sector to work with those teachers already committed to built environment education and to apply their knowledge, experience and credibility (as practitioners) to promote the opportunities and realities of using buildings and places in teaching amongst the wider profession.

- *Engaging Places* therefore has a crucial role to play in (i) continuing to bring together the supply and demand elements of built environment education, (ii) to focus on bridging the gap between teachers' (and other end-users) awareness and understanding of the potential of these resources, experiences and opportunities and (iii) at raising the general profile and importance of helping children and young people to learn about and engage with the buildings and places that characterise their physical environment.

1. Awareness of the built environment as a learning resource

Learning points

- Although teachers identified promotional material as a key way in which they had become aware of built environment education, *Engaging Places* will require both a strong publicity and promotional strategy.
- The importance of Initial Teacher Training (ITT) as a key vehicle through which to raise teacher awareness of the built environment sector should be considered including, for example, a specific module in ITT focused on how buildings, places and spaces can be used in teaching.
- Raising awareness of LOtC, in general, needs to go run in parallel with awareness raising of the built environment sector and *Engaging Places*.
- Built environment education affords many positive outcomes for pupils and students. The sector may benefit further by reinforcing the 'shared culture' aspect of local buildings and places, in that buildings and spaces can act as a unifying force in society and bring people together.

Providers' views on schools' interest in, and take-up of, built environment education

Whilst noting some variability, providers were **generally positive** about schools' levels of interest in, and take-up of, built environment education. Reasons given to support this outlook included: providers' projects and workshops being fully booked in advance; evidence of increasing demand; and benefits derived from topical initiatives such as the Learning Outside the Classroom Manifesto (LOtC) and Building Schools for the Future.

The minority of providers who felt that schools' current take-up and levels of interest were poor attributed this to variations in the take-up and interest from schools and a lack of teacher understanding and confidence in this area.

Teachers' awareness of the built environment as a learning resource

Overall, teachers, headteachers and governors noted **good levels of awareness** of the educational potential of buildings and local places as a learning resource. The majority of teachers (over four-fifths) were either 'very aware' or 'quite aware' of the educational potential of the built environment, with headteachers' and governors' responses reflecting similar findings.

The main elements thought to be underpinning schools' current levels of awareness, as identified by provider and school representatives, included:

- promotional material
- project work
- networks
- local authority personnel/activity.

Teachers also noted additional means through which they had become aware of buildings and local places as a learning resource. This included: through their own personal interest and/or knowledge, which was often related to either the subject taught, or the subject studied whilst at University or college; and training and continuing professional development (CPD) opportunities. A small number of teachers indicated that their awareness had developed through campaigns and initiatives within the sector and during their Initial Teacher Training (ITT). Substantial variations in the provision of LOtC training across courses and ITT institutions (Kendall *et al.*, 2006) may explain why ITT did not feature more significantly as a means through which teachers became aware of the built environment as a learning resource.

There was less awareness of the Learning Outside the Classroom Manifesto (LOtC) in general, than built environment education specifically, with just under three-fifths of school interviewees saying that they were not aware of it. However, of those who were aware of the Manifesto, all regarded education relating to buildings and local places as being a key part of it.

Teachers' enthusiasm for, and value of, using buildings and local places within teaching

Three-quarters of teachers were **enthusiastic** about using buildings and local places within their teaching, with this being linked to the:

- positive social and academic impacts on pupils/students
- importance of pupils/students learning about their local environment and community, its history and development
- cross-curricular opportunities and grounded links to other agendas, such as environmental issues.

Alongside this, the vast majority of teachers considered buildings and local places to be a **‘very valuable’** or **‘valuable’** learning resource. It was thought to impact positively on student learning through enhancing and enriching the curriculum.

Headteachers’ and governors’ views on using buildings and local places in teaching

Headteachers and governors reported placing a ‘high’ priority/emphasis on built environment education within their school. Alongside this, just over three-quarters of headteachers felt that buildings and local places had a role to play in supporting whole-school improvement through: increased opportunities for experiential learning for pupils and students; increased pupil and student motivation; and enabling pupils and students to develop an understanding of their own local area. As such, approximately three-quarters of headteachers and governors stated that buildings and local places featured in their school plans, strategies and policies.

2. Understanding of the built environment as a learning resource: uses and applications

Learning points

- Teachers commonly engaged in built environment activities that focused on the immediate, easily accessible local environment. The sector may wish to further highlight other locally-based activities that teachers could use such as parks, squares, leisure areas, conservation areas and ordinary spaces such as country lanes and roadsides.
- Built environment education providers should seek to further promote their services to teachers in their immediate locality, as it appears that teachers predominantly engage in activities that are local to their pupils and students.
- A clear benefit of built environment education is the variety of activities/resources it offers children and young people across key stages 1-5 and the opportunities it provides for use with specific groups of children and young people (i.e. disengaged, black and minority ethnic). These specific benefits should be advocated to school staff.
- Built environment education has apparent cross-curricular applications and can be seen as an ideal opportunity to do so. The current key stage 3 curriculum reforms provide an opportunity for the built environment education sector to position itself further as an effective way of delivering cross-curriculum education.

The provision on offer

The main built environment education activities undertaken by providers focussed on the provision of:

- networks with other built environment-related organisations
- site visits and experiences
- printed resources including generic information for schools and teachers; specific information for schools and teachers linked to the session/visit; and published materials
- professional development for teachers, such as formal activities (i.e. INSET training days) and informal activities (i.e. providing training whilst directly working with a teacher on a project)
- projects with schools or colleges
- virtual/web-based resources (i.e. e-books and downloadable worksheets/information sheets).

The provision used by schools

Schools most commonly used the built environment in activities related to five areas:

- school grounds
- local town/village/city
- local high street/streetscapes
- local museums and galleries
- architecture of local, historic buildings.

All of these built environment activities focused on the immediate, local environment and this ease of accessibility may be one of the main contributing factors as to their popularity. This supports previous NFER research (O'Donnell *et al.*, 2006) where it was reported that schools most commonly engaged in learning outside of the classroom through school site activities.

In order to ascertain how schools *currently* use buildings and local places in learning, teachers were asked to provide additional information on how their pupils and students presently engaged with the built environment. Mirroring the previous findings, the exploration of school grounds was a popular way of learning about the area. In addition, other key ways of engaging with buildings and local places included:

- site visits
- classroom discussions
- project work

- explorations of the local community.

Teaching related to buildings and local places most frequently focused on historic buildings and green/environmental issues. Alongside this, streets/streetscapes, places of worship and regeneration were also common focuses of teaching related to buildings and local places.

Geographical remit

In the main, built environment education providers stated that they served either a regional or national audience. In contrast, teachers most commonly indicated that they used the local area where their students lived when teaching about buildings and local places. This may suggest that there is a discrepancy between the remit of built environment providers and the needs of teachers, in that providers see themselves as serving schools primarily at a national and regional level, whereas teachers typically use providers in the local area. That said, however, approximately two-fifths of teachers did state that they took their pupils/students on visits to regional and national built environment sites. This perhaps conveys the importance of engaging with buildings and local outside of a pupils'/students' own environment to spaces which raise aspirations and motivate visual, kinaesthetic and experiential learning.

Young people worked with

Built environment education providers worked with a range of children and young people. This highlights the variety of activities/resources on offer within the sector and the opportunities it affords across ages. Providers worked with children and young people from across key stages 1–5 and did not tend to work solely with one particular age group. Over half of providers also reported working with specific groups of children and young people including, most commonly: disengaged/disaffected young people; black and minority ethnic groups; children with learning difficulties and disabilities; and gifted and talented children.

Curriculum links

Providers and teachers linked built environment education to a wide range of different curriculum and subject areas, thus reinforcing built environment education as an effective discipline for delivering cross-curriculum learning. History and geography were the predominant curriculum/subject areas to which teachers and providers linked built environment education. Other commonly linked curriculum/subject areas included: art and design; religious education; and personal, social and health education/citizenship.

The main reasons why teachers linked built environment education to specific curriculum/subject areas were that the school had a 'creative curriculum' based on thematic schemes of work and/or that it was a requirement of the

National Curriculum. This latter reason supports findings from previous NFER research (O'Donnell *et al.*, 2006) which found that a pupil's/student's access to learning outside of the classroom, at key stages 3 and 4, was determined by the curriculum they were following (i.e. geography).

Approximately half of providers reported linking built environment activities to vocational and non-formal learning, such as family learning and out of school hours learning. Teachers also noted a range of key skills that built environment education supported including, most commonly: observation and investigation; speaking and listening; literacy and numeracy; and spatial/visual awareness. Buildings, places and spaces could be an important way of tapping into and developing young people's creativity and potentially highlighting talents that may have gone unrecognised in more formal learning situations. As such, the practical, kinaesthetic learning experience that the built environment can provide during visits and projects work could have a stimulating effect on young people and, thus, impact on their concentration and learning in other areas of the curriculum.

3. Facilitators and challenges to using built environment education in teaching

Learning points

- Awareness and understanding of built environment education plays a central role in encouraging teachers to incorporate it into their teaching. However, logistical and practical issues such as cost, transport and regulations/policies may prevent actual take-up.
- Previous research conducted by the NFER (O'Donnell *et al.*, 2006) adds further support to the importance of these facilitators and challenges in the use of LOTC in general. As such, the sector should actively seek to address each of them in order to encourage greater use of built environment education within schools.

Factors facilitating the use of built environment education in teaching

The main facilitator to using built environment education within teaching, as identified by teachers and headteachers, was an awareness and understanding of the educational potential of buildings and local places. Other factors that helped teachers use built environment education in teaching included:

- the availability of sites to visit
- the confidence to use built environment education in teaching
- the availability of resources
- links to the National Curriculum.

Similar issues were reported in previous NFER research (O'Donnell *et al.*, 2006) thereby further reinforcing these factors as key facilitators in relation to uptake.

Barriers and challenges in using buildings and places in teaching

The factors identified by teachers and headteachers as being the most unhelpful to the use of buildings and places in teaching tended to be those that presented largely logistical and practical challenges or barriers. This included issues of accessibility such as costs, transport and regulations/policies. Similar issues were again raised by O'Donnell *et al* (2006), thus adding further weight to these factors in preventing the use of the built environment within teaching.

In relation to the cost of built environment education, providers were, in the main, offering free access to schools. However, of those providers interviewed, approximately a third stated schools paid for their services. These charges ranged from £2.00 to £4.00 per head and were dependent on a number of factors including: the length of the visit; membership fees; and size of school group.

The school timetable and links with the National Curriculum were also identified as challenges to using built environment education in teaching. It was noted that the changing popularity of particular subjects could have a bearing on the extent to which buildings and local places were used in teaching.

4. Encouraging greater take-up of opportunities

Learning points

- Any resource/education pack developed by the sector needs to involve teachers to test the content.
- A national CPD programme should support any distribution of resources which should aim to develop greater understandings about the delivery of built environment education across the curriculum. CPD would also support teachers in making links between policies, initiatives and agendas.
- Local authority advisors could be very effective in supporting schools to deliver built environment education locally. However, advisors may need further support and training to fully understand and advocate the cross-disciplinary nature of built environment education. As many of the advisors are currently subject specific, it may be necessary to rethink ways in which advisors collaborate in order to support cross-curricular delivery.

Factors encouraging increased take-up of built environment education in schools and teaching

Built environment education providers, teachers and headteachers all considered the following four factors to be key ways of increasing take-up of built environment education:

- more information and resources
- support for health and safety guidelines and risk assessments
- greater emphasis in the National Curriculum
- training and CPD for teachers.

There was also considerable support from teachers and headteachers for the provision of schemes of work, although there was some concern that this may ‘kill creativity’.

General awareness raising

Teachers and headteachers thought that the national profile of the built environment sector could be raised in a number of ways including:

- articles in teacher publications
- the use of INSET for training
- positive media coverage of LOtC activities (i.e. successful and safe school trips)
- greater integration and support from the built environment sector with schools (i.e. organisations within the sector working together and with schools).

Additional support from national and local organisations

Headteachers suggested a range of ways in which national and local organisations could help support schools in the use of built environment education. These included:

- Department for Children Schools and Families (DCSF) – revising the National Curriculum to promote and enable schools to conduct more work in this area. The current curriculum reforms may go some way in addressing this issue.
- Local authorities – to provide additional resources and information about local sites of interest; to provide CPD opportunities; to assist schools in carrying out risk assessments; to advocate more out of school visits and to help negotiate school access to less accessible buildings. This suggests the need for a dedicated local authority advisor who could advocate and support the use of built environment education.

- Built environment education providers – improving access to, and relevance of, resources (e.g. age appropriate resources for younger children); and greater publicising of built environment education opportunities available to schools.

Access to information and resources

There were more teachers who felt that they did not have sufficient information and, more importantly, resources to assist them in incorporating built environment education into their teaching, than those who felt they did. The reasons for this focused on:

- a shortage, or a lack of awareness, of information/resources available
- curriculum issues such as a lack of age appropriate resources and ‘poor’ textbook and publication resources
- a belief that high profile sites had good resources to assist learning but that provision was patchy and other providers lacked resources.

Teachers identified a need for additional support to assist them in using built environment education across the curriculum. Education packs, links to relevant websites and, importantly, more face-to-face support were suggested. This latter point included local authority advisors who could provide support, inspiration and advocacy for this way of learning.

5. Usefulness of a single source of information

Learning points

- The *Engaging Places* website will help meet the self-identified needs of teachers in that it is an online resource. However, the website needs to contain both national and, most importantly, local information to be of most use to schools.

More than three-quarters of teachers and the vast majority of headteachers and governors felt that a single source of information would be useful in telling them about using built environment education as a teaching resource. Most recommended that this single source should be web-based and include information on:

- what built environment education is
- why teachers might want to include it in their teaching (i.e. the benefits)

- contact details of providers, local authority advisors and schools that had successfully worked in this area
- good practice examples and case studies
- clear links to the curriculum and provisions of schemes of work
- information about general topics/subject areas, as well as details and issues surrounding more specific buildings and projects
- local and non-local information.

6. Concluding remarks

The two elements of this research have demonstrated considerable enthusiasm from both the supply and demand sides of the built environment education equation. The latent and actual potential of using buildings and places has been understood by providers and schools.

Engaging Places may be the effective vehicle to develop and promote the role and value of buildings, places and spaces in teaching. In order to achieve this, there is a need for the providers and the consumers/users of built environment education to interact and communicate to ensure that the provision on offer is relevant and useful to those using it, and to also ensure that these users are fully aware of the potential of the resources available to them.

Engaging Places has a key role to play in bridging the gap between what organisations provide on learning and what learners and educators need. A coordinating role will also be important if links are pursued with other agendas, manifestos and policies, such as Every Child Matters, LOtC and Sustainable Schools. In this way, buildings and places will be seen as valid learning resources that can be incorporated into teaching and learning practices.

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